



NSF NQVL Town Hall Advancing Quantum Computing with Neutral Atoms

MIT Endicott House

Sunday, January 26, 2025

3:00 pm Check-in begins at MIT Endicott House

7:00 pm Welcome reception

Monday, January 27, 2025

8:00 am Breakfast

9:00 am Welcome and introduction

Neutral Atom Hardware: Part 1 of 2

9:05 am Introduction by moderator Hengyun (Harry) Zhou (QuEra)

9:10 am Dolev Bluvstein (Harvard)

9:25 am Mark Saffman (Wisconsin / Infleqtion)

9:40 am Alexandre Cooper-Roy (Waterloo)

9:55 am Giulia Semeghini (Harvard)

10:10 am Panel Discussion

10:45 am Coffee Break

Next-Generation Photonics: Part 1 of 2

11:00 am Introduction by moderator Dirk Englund (MIT)

11:05 am Adrian Menssen (MIT)

11:20 am Matt Eichenfield (Arizona)

11:35 am Dan Blumenthal (UC Santa Barbara)

11:50 am Bingzhao Li (Washington)

12:05 pm Panel Discussion

12:30 pm Lunch



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Defining Practical Quantum Advantage

- 1:30 pm Introduction by moderator Soonwon Choi (MIT)
- 1:35 pm Norman Yao (Harvard)
- 1:50 pm Aram Harrow (MIT)
- 2:05 pm Joonho Lee (Harvard)
- 2:20 pm Di Luo (UCLA)
- 2:35 pm Michael Gullans (Maryland)
- 2:50 pm Noah Shutty (Google)
- 3:05 pm Panel Discussion
- 3:45 pm Coffee Break

Quantum Interconnects and Interfaces

- 4:00 pm Introduction by moderator Jeff Thompson (Princeton)
- 4:05 pm Vladan Vuletic (MIT)
- 4:20 pm Jacob Covey (Illinois)
- 4:35 pm Jon Simon (Stanford)
- 4:50 pm Ivana Dimitrova (Northeastern)
- 5:05 pm Johannes Borregaard (Harvard / Lightsinq)
- 5:20 pm Akihisa Goban (Nanofiber Quantum Technologies)
- 5:35 pm Panel Discussion
- 6:30 pm Dinner

Focus Session on Workforce Development

- Robin Côté (UMass Boston)
- Steven Hubbard (MassTech)
- Robert Niffenegger (UMass Amherst)



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Tuesday, January 28, 2025

8:00 am Breakfast

Neutral Atom Hardware: Part 2 of 2

9:00 am Lucas Lassablière (Pasqal)

9:15 am Johannes Zeiher (MPQ / planqc)

9:30 am Jeff Thompson (Princeton)

9:45 am Benjamin Bloom (Atom Computing)

10:00 am Panel Discussion

10:30 am Coffee Break

Next-Generation Photonics: Part 2 of 2

10:45 am Nathan Gemelke (QuEra)

11:00 am Marko Loncar (Harvard)

11:15 am Kiyoul Yang (Harvard) - *remote*

11:30 am Industry focus: Oleg Mishechkin (IPG), Ming-Guang Hu (QTek)

11:45 am Panel Discussion

12:15 pm Lunch



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Quantum Error Correction

- 1:15 pm Introduction by moderator Jacob Taylor (Maryland)
- 1:20 pm Liang Jiang (Chicago)
- 1:35 pm Aleksander Kubica (Yale)
- 1:50 pm Nicolas Delfosse (IonQ)
- 2:05 pm Eun-Ah Kim (Cornell)
- 2:20 pm Panel Discussion
- 2:50 pm Coffee Break

Large-Scale Quantum Control and Compilation Digital Twins and Virtual Collaboration Tools

- 3:00 pm Introduction by moderator Jason Cong (UCLA)
- 3:05 pm Yunong Shi (Amazon)
- 3:20 pm Hanrui Wang (UCLA)
- 3:35 pm Daniel Tan (Harvard)
- 3:50 pm Jan Balewski (NERSC)
- 4:05 pm Elica Kyoseva (NVIDIA)
- 4:20 pm Prith Banerjee (ANSYS) - *remote*
- 4:35 pm Panel Discussion
- 5:10 pm Closing Remarks
- 5:15 pm Departure

Executive Committee

Dirk Englund (MIT), Mikhail Lukin (Harvard), Paola Cappellaro (MIT),
Jacob Taylor (Maryland), Jason Cong (UCLA)

Organizing Committee

Adrian Menssen (MIT), Tout Wang (Harvard), Andrew Stasiuk (MIT),
Hanyu Wang (UCLA), Jon Kunjummen (Maryland), Thomas Propson (MIT),
Avinash Kumar (MIT), Erik Yost (MIT)



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